



In this April 20, 2011 photo (L.) provided by NASA, the Hubble Space Telescope captures **a group of interacting galaxies call Arp 273**. A series of uncommon spiral patterns in the large galaxy is a tell tale sign of interaction. Arp 273 lives in the constellation Andromada and is roughly 300 million light year away from Earth. Hubble was launched April 24, 1990, aboard Discovery's STS 2` mission. (AP Photo/NASA)**Our Executive Director, Marlene Brown, and her husband Earl Lewis, were among Museum Educators invited to Goddard Space Center, where they once again met Dr. James B. Garvin, (center I) NASA's Chief Scientist, serving the Agency and Administrator as the primary advisor for the entire NASA science portfolio. His duties include advising the senior leaders of the Agency on matters that range from how science fits into the Vision for Space Exploration. In his former capacity as the Lead NASA Scientist for Mars Exploration, Dr. Garvin was instrumental in formulating and developing the NASA scientific strategy for Mars, and most recently, that for the Moon as well. saw the building of the new Telescope keeps growing and plans to make our STEM Center w/Planetarium + offices & lofts a reality to ensure future sustainability and to prepare our young people for the future disciplines..**



UTICA OD — Joseph Ribaldo doesn't just gaze at the stars – he studies how they're made. The assistant professor of physics at Utica College is part of a team of researchers from across the country exploring how galaxies are formed by studying something called circumgalactic gas. Their research, funded by NASA, was recently submitted for publication in a prominent academic journal. It's really interesting to me what you can know about objects that are so far away," Ribaldo said. Circumgalactic gas is a relatively cool gas that forms a sort of cocoon or envelope around a galaxy. It's difficult to see because it's not emitting light; but with updates in technology, the researchers are now able to identify it". With funding from Nasa and the National Science Foundation, the team made use of the powerful Hubbel, Keck and Magellan telescopes to study the gas. Ribaldo's research involves identifying elements in it and where they come from. "We can definitely say the gas exists", he said. "The research suggests some of that gas is definitely destined to fuel star formation." Future research will try to confirm that. It gives us a really interesting look on how galaxies evolve over time," Ribaldo said. The team Ribaldo works with is led by Nicolas Lehner, a research associate professor at the University of Notre Dame. **Also a Children's Museum board member, Joe does programs on our planned "Planetarium/STEM Center"**